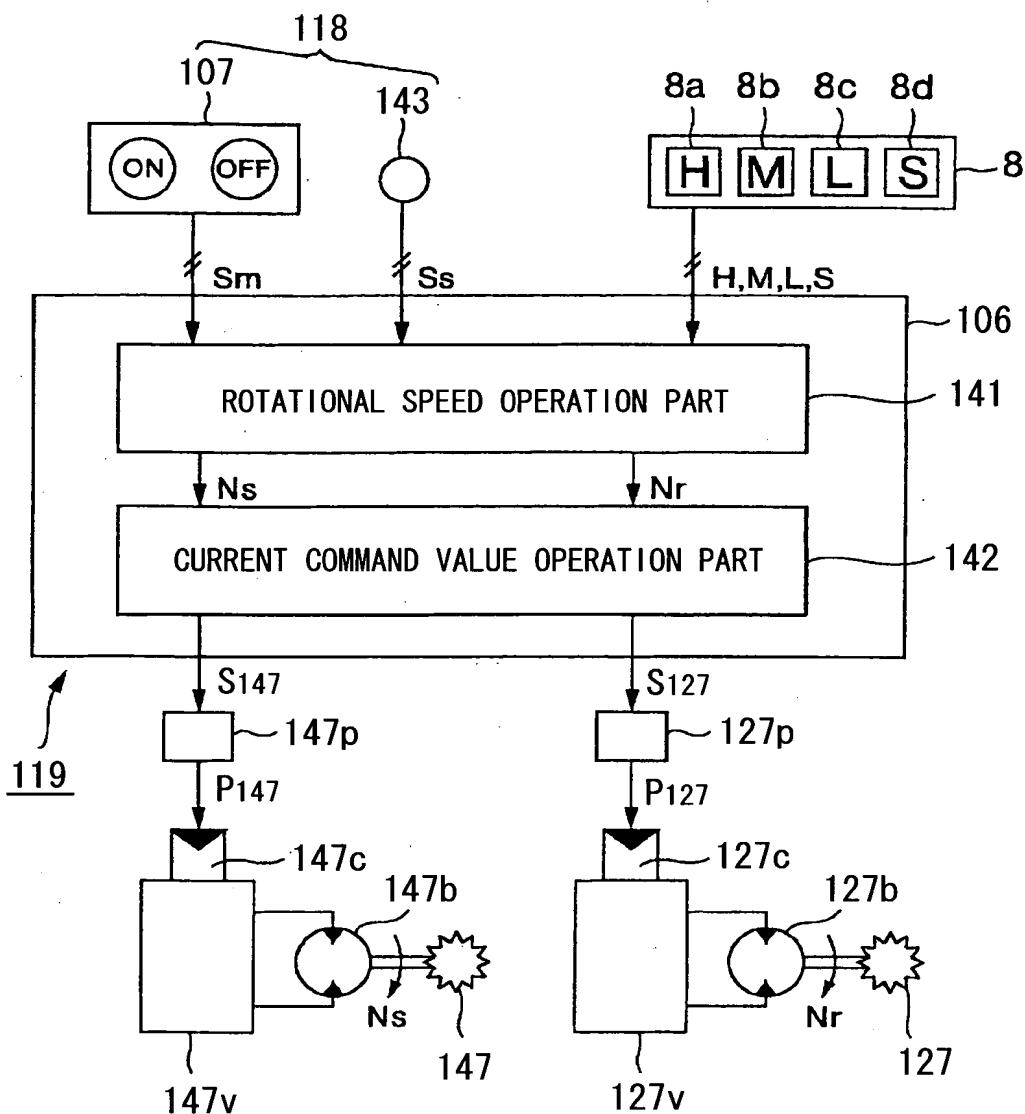


F I G. 1





## F I G. 2

WHEN  $S_m=ON$  AND  $S_s=OFF$ 

	H	M	L	S
SOIL CUTTER ROTATIONAL SPEED $N_s$	a10	a20	a30	a40
ROTARY HAMMER ROTATIONAL SPEED $N_r$	b10	b20	b30	b40

110a

WHEN  $S_m=ON$  AND  $S_s=ON$ 

	H	M	L	S
SOIL CUTTER ROTATIONAL SPEED $N_s$	a40	a40	a40	a40
ROTARY HAMMER ROTATIONAL SPEED $N_r$	b10	b20	b30	b40

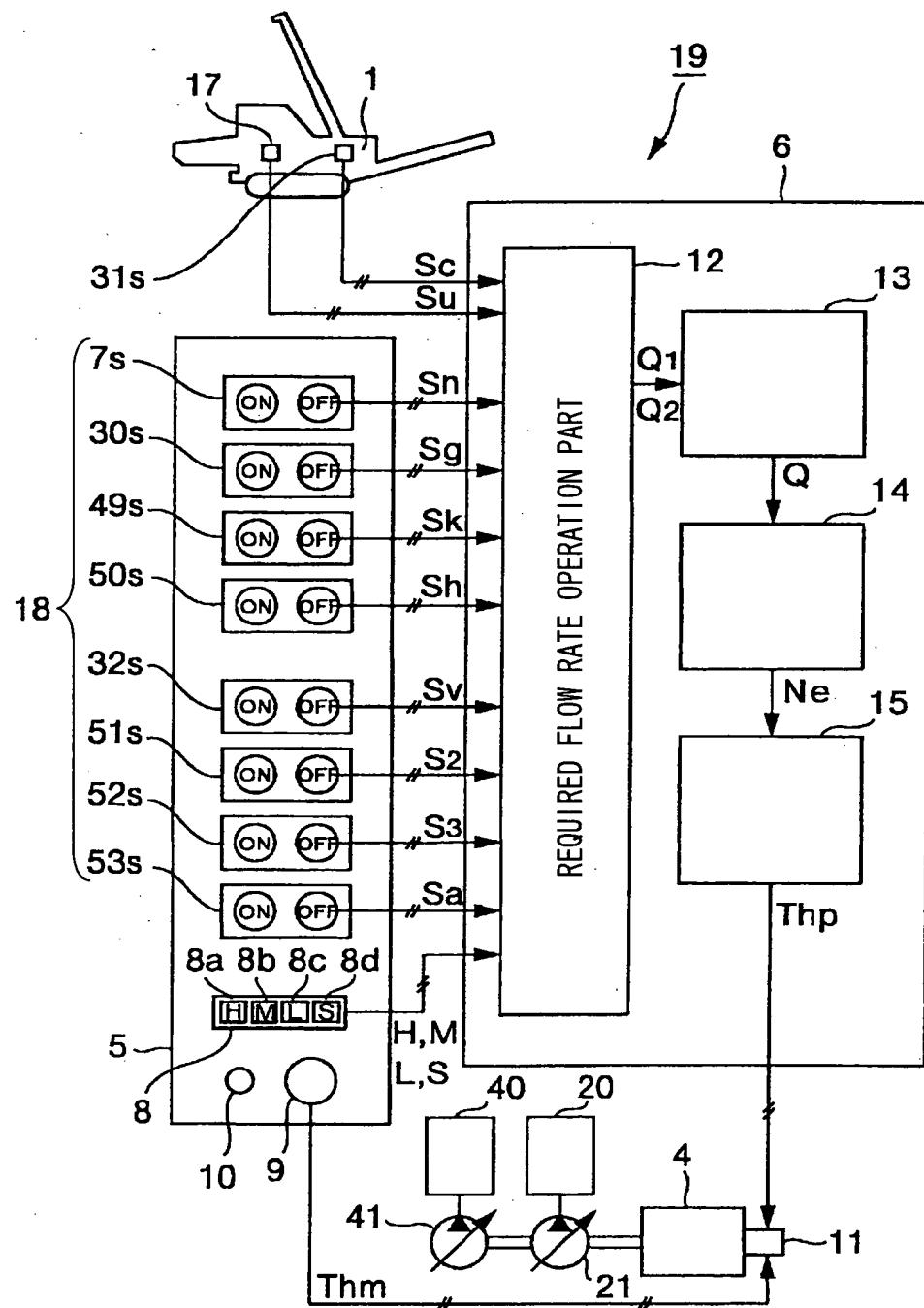
110b 110

WHEN  $S_m=OFF$ 

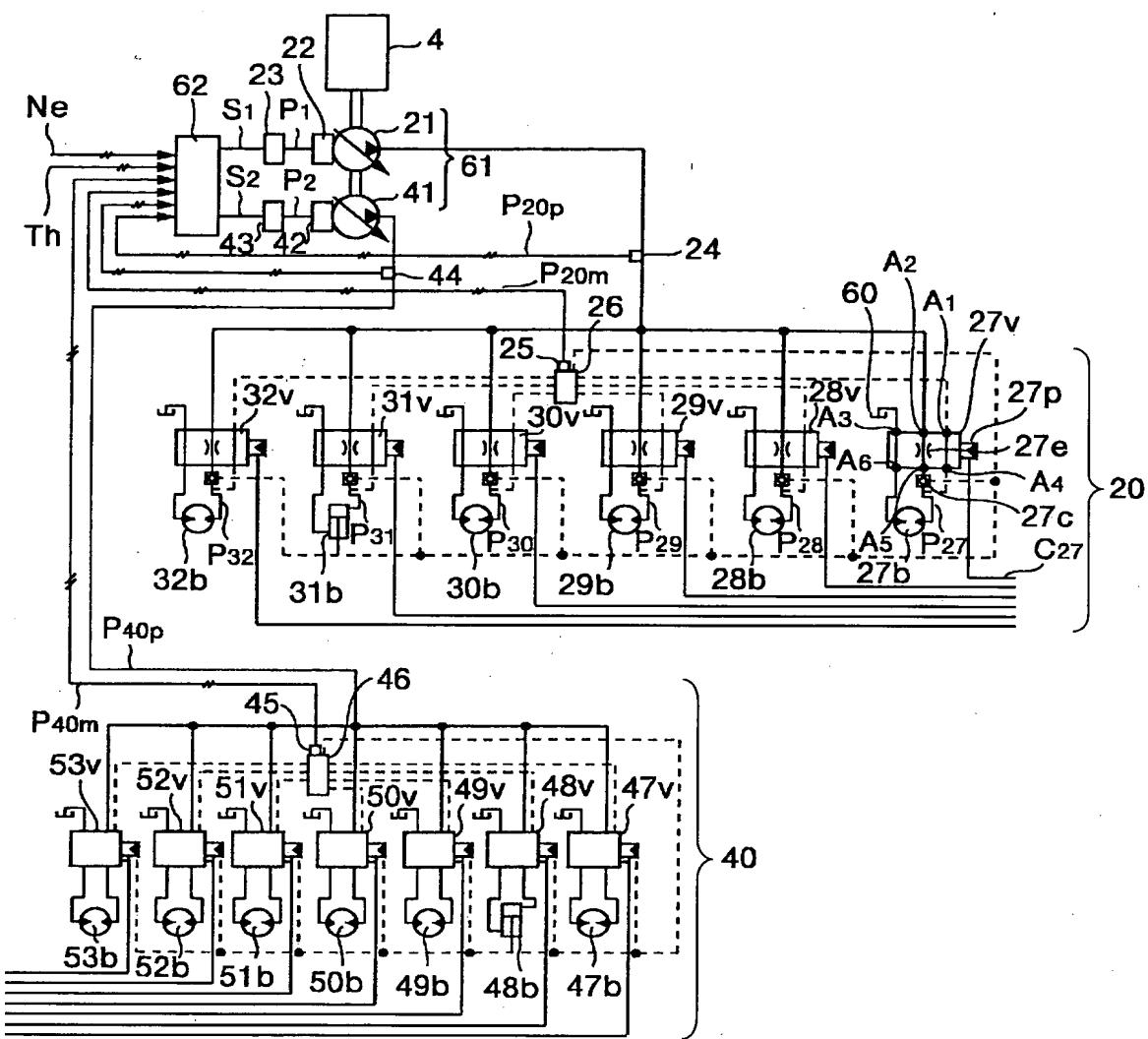
	H	M	L	S
SOIL CUTTER ROTATIONAL SPEED $N_s$	0	0	0	0
ROTARY HAMMER ROTATIONAL SPEED $N_r$	0	0	0	0

110c

F I G. 3



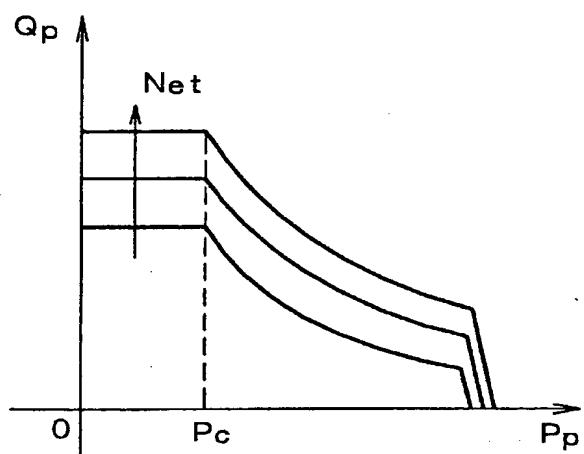
F I G . 4





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F I G. 5





F I G. 6 A

FIRST CIRCUIT GROUP

ACTUATOR		H	M	L	S
FIRST ROTARY HAMMER 27	PRESENCE OF RAW SOIL	a1	b1	c1	d1
	ABSENCE OF RAW SOIL	a2	b2	c2	d2
SECOND ROTARY HAMMER 28	PRESENCE OF RAW SOIL	a3	b3	c3	d3
	ABSENCE OF RAW SOIL	a4	b4	c4	d4
THIRD ROTARY HAMMER 29	PRESENCE OF RAW SOIL	a5	b5	c5	d5
	ABSENCE OF RAW SOIL	a6	b6	c6	d6
FEED BELT CONVEYOR 30		a7	b7	c7	d7
CRANE 31		a8	b8	c8	d8
VIBRATING SIEVE 32		a9	b9	c9	d9

F I G. 6 B

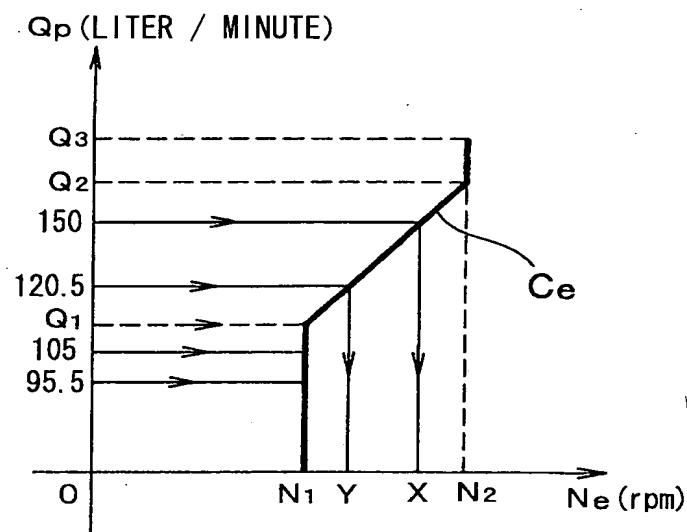
SECOND CIRCUIT GROUP

ACTUATOR		H	M	L	S
SOIL CUTTER 47	PRESENCE OF RAW SOIL	e1	f1	g1	h1
	ABSENCE OF RAW SOIL	e2	f2	g2	h2
SOLIDIFYING MATERIAL FEEDER 48	PRESENCE OF RAW SOIL	e3	f3	g3	h3
	ABSENCE OF RAW SOIL	e4	f4	g4	h4
RAKING ROTOR 49		e5	f5	g5	h5
DISCHARGE BELT CONVEYOR 50		e6	f6	g6	h6
SECONDARY BELT CONVEYOR 51		e7	f7	g7	h7
TERTIARY BELT CONVEYOR 52		e8	f8	g8	h8
AIR COMPRESSOR 53		e9	f9	g9	h9



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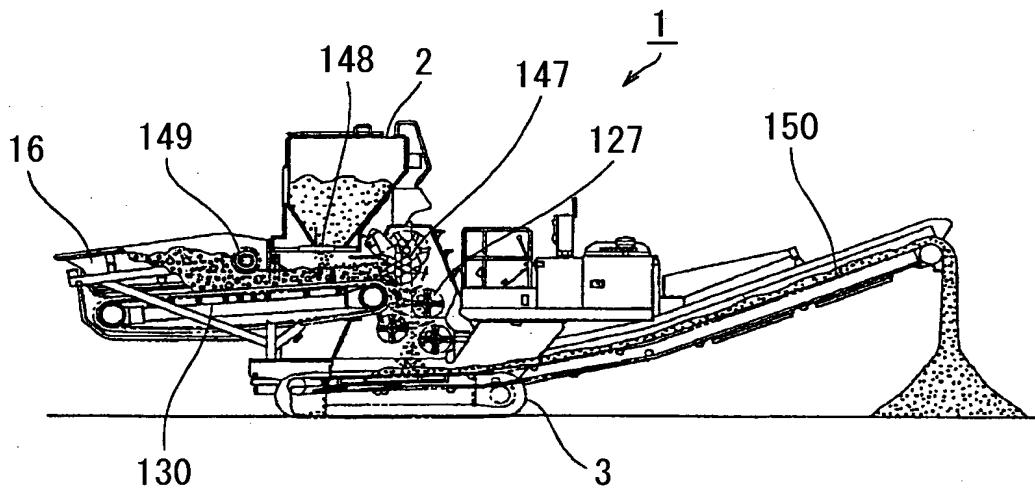
F I G. 7



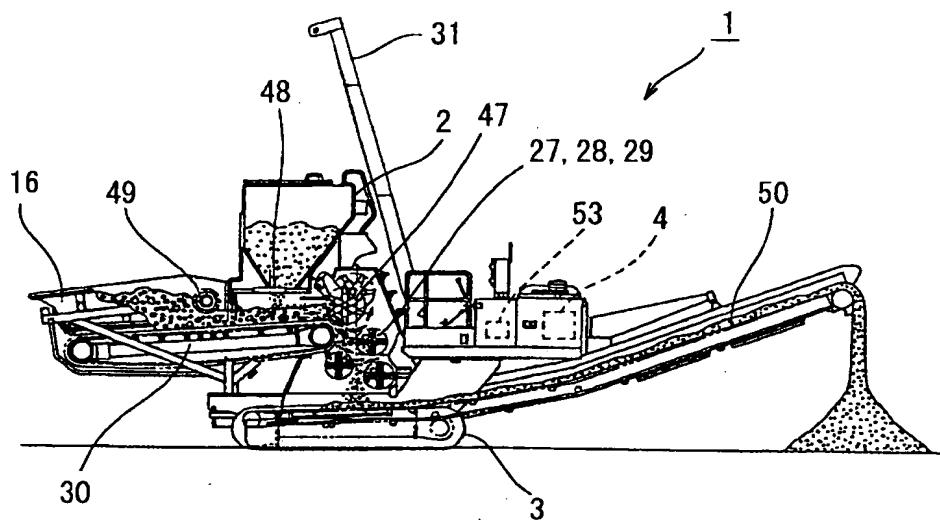
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F I G . 8 Prior Art



F I G. 9 A Prior Art



F I G. 9 B Prior Art

